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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,081	07/08/2003	Karine Excoffier	03226.501001;P646	9680

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EXAMINER

FILIPCZYK, MARCIN R

ART UNIT PAPER NUMBER

2163

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/616,081

Applicant(s)

EXCOFFIER ET AL.

Examiner

Marc R. Filipczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 24-29 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

This Action is responsive to Application filed on July 8, 2003 wherein claims 1-29 are submitted for examination.

**To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).**

#### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-23 are drawn to data structure, classified in class 707, subclass 101.
  - II. Claims 24-29 are drawn to filtering, classified in class 707, subclass 3.
2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case invention I (data structure) has separate utility such as computer implemented tree data structures. Invention II (filtering) has separate utility such as in any filtering and translation systems.

3. Because these inventions are distinct and search Groups I and II are not required to be simultaneous, restriction for examination purposes as indicated is proper.

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4. Examiner has conducted a telephone interview with Robert Lord wherein the Applicants elected Group I, claims 1-23 without traverse.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### *Drawings*

The drawings are objected to because Figure 7, parent or root entry label is missing. No new matter should be added. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth whether the invention is within the technological arts and whether it generates a tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a claim to pass muster, the recited steps must somehow apply, involve, use, or advance the technological arts such as a computer and produce a tangible result. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02.

In the present case, independent claims 1 and 17 are within technological arts but do not generate a tangible result. Claims 1 and 17 do not produce a useful, concrete and tangible result, and are hence nonstatutory.

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Since the claimed invention taken as a whole is not within the technological arts as explained above, claims 2-16 and 18-23 which depend from 1 and 17, respectively, are deemed to be directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, the term “capable” is indefinite. It is not clear what the metes and bounds of capable are. It is further not clear if the associated mechanisms and functions perform the claimed features, since capable does not mandate any action. Second, the feature of “associating a virtual attribute to an entry subject to a virtual attribute condition being verified” is indefinite. It is not clear if association, verification, or both association and verification are being performed and steps how they are performed are missing in the claim. Third, the term “elsewhere” is indefinite. It is not clear what the metes and bounds of elsewhere are, hence the exact location is not known. The phrase “for converting” is indefinite. It is not clear if converting takes place. If converting takes place, it is not clear how the conversion from one filter to another filter is performed. Last, the terms “attributes, real attributes, virtual attributes and entry subject are not clearly used in the claims and contribute to the indefinite subject matter in the claimed invention.

Regarding claim 17, the method claim comprises similar subject matter as system claim 1, thus claim 17 is rejected on the same basis as claim 1.

Regarding claims 2-16 and 18-23 depend from claims 1 and 17, respectively, and are therefore rejected on the same basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-23 are rejected under 35 U.S.C. 102(e) as best as the Examiner is able to ascertain as being anticipated by Byrne et al (U.S. Patent No. 6,347,312).

Regarding claims 1 and 17, Byrne discloses a directory server (fig. 1, item 12, *directory server*), system capable of interacting with entries organized in a tree structure (figs. 1 and 2), each entry having attributes, the attributes comprising real attributes each having a value stored in the entry, the system comprising (fig. 2, items 27 and 29 and col. 4, lines 17-38):

A mechanism capable of associating a virtual attribute to an entry subject to a virtual attribute condition being verified, the virtual attribute condition being derived from data located elsewhere in the tree structure (fig. 5, *LDAP Query* and fig. 7, items 62, 65-68); and

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A resolving function capable of receiving a first filter expression based on a virtual attribute, the resolving function for converting the first filter expression into one or more second filter expressions comprising real attributes and computed from the first filter expression and from the virtual attribute condition (figs. 6 and 7, and col. 8, lines 50-66, *filter key* in cache).

Regarding claims 2-16 and 18-23, these claims are at least rejected for their dependencies on the rejected claims 1 and 17, respectively .

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents show the state of art with respect to directory systems including tree structures:

U.S. Patent No. 6,983,269 of Shi et al.

U.S. Patent No. 6,970,873 of Fu et al.

U.S. Patent No. 6,768,988 of Boreham et al.

U.S. Patent No. 6,363,375 of Hoshino et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MF  
March 17, 2006

  
**FRANTZ COBY**  
**PRIMARY EXAMINER**